TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Alabama									
Department of Defense, RDT&E	3,795,256.8	1,449,159.3	2,305,836.7	0.0	34,027.1	0.0	6,233.7	0.0	0.0
Department of Defense, research	122,349.2	23,463.9	84,465.2	0.0	14,252.4	0.0	167.7	0.0	0.0
Department of Defense, total experimental development ^b	3,430,071.2	1,298,479.3	2,105,786.9	0.0	19,765.4	0.0	6,039.6	0.0	0.0
Department of Defense, operational systems development ^c	242,836.4	127,216.1	115,584.7	0.0	9.3	0.0	26.3	0.0	0.0
Alaska									
Department of Defense, RDT&E	133,805.0	37,528.7	68,507.6	0.0	8,859.6	0.0	1,500.0	0.0	17,409.1
Department of Defense, research	10,732.4	0.0	1,437.7	0.0	7,794.7	0.0	1,500.0	0.0	0.0
Department of Defense, total experimental development ^b	113,451.3	37,042.0	58,086.4	0.0	913.7	0.0	0.0	0.0	17,409.1
Department of Defense, operational systems development ^c	9,621.3	486.7	8,983.4	0.0	151.2	0.0	0.0	0.0	0.0
Arizona									
Department of Defense, RDT&E	1,835,454.6	126,834.8	1,652,356.0	0.0	47,832.8	0.0	300.1	0.0	8,130.9
Department of Defense, research	96,456.8	3,789.4	48,573.4	0.0	43,793.9	0.0	300.1	0.0	0.0
Department of Defense, total experimental development ^b	1,319,589.0	80,869.9	1,226,623.1	0.0	3,965.1	0.0	0.0	0.0	8,130.9
Department of Defense, operational systems development ^c	419,408.8	42,175.6	377,159.5	0.0	73.7	0.0	0.0	0.0	0.0
Arkansas									
Department of Defense, RDT&E	53,272.5	943.0	45,796.3	0.0	6,533.1	0.0	0.0	0.0	0.0
Department of Defense, research	8,357.1	82.7	1,858.5	0.0	6,415.9	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	44,463.7	423.1	43,937.9	0.0	102.8	0.0	0.0	0.0	0.0

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

			Extramural							
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments	
Department of Defense, operational systems development ^c	451.7	437.3	0.0	0.0	14.4	0.0	0.0	0.0	0.0	
California										
Department of Defense, RDT&E	9,024,648.8	2,800,498.1	5,269,790.9	93,038.4	425,579.1	15,093.8	91,445.7	327,196.2	2,006.6	
Department of Defense, research	974,825.5	157,215.7	321,942.6	27,153.4	379,513.1	13,764.6	70,043.2	5,014.0	178.9	
Department of Defense, total experimental development ^b	6,513,212.4	2,115,755.2	4,005,319.3	62,969.0	42,439.2	1,329.3	21,257.5	262,315.2	1,827.7	
Department of Defense, operational systems development ^c	1,536,611.0	527,527.2	942,529.0	2,916.0	3,626.8	0.0	145.0	59,867.0	0.0	
Colorado										
Department of Defense, RDT&E	2,680,132.3	81,255.8	2,540,511.6	0.0	50,114.2	0.0	4,702.5	3,548.3	0.0	
Department of Defense, research	80,648.3	10,271.8	25,054.7	0.0	44,735.2	0.0	202.4	384.1	0.0	
Department of Defense, total experimental development ^b	1,965,977.5	68,478.1	1,884,624.0	0.0	5,213.4	0.0	4,500.0	3,162.0	0.0	
Department of Defense, operational systems development ^c	633,506.5	2,505.9	630,833.0	0.0	165.5	0.0	0.0	2.2	0.0	
Connecticut										
Department of Defense, RDT&E	1,969,505.5	3,806.3	1,945,060.8	0.0	15,911.3	0.0	4,727.2	0.0	0.0	
Department of Defense, research	43,141.8	0.0	24,093.0	0.0	14,321.7	0.0	4,727.2	0.0	0.0	
Department of Defense, total experimental development ^b	1,759,402.3	3,806.3	1,754,006.4	0.0	1,589.6	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	166,961.4	0.0	166,961.4	0.0	0.0	0.0	0.0	0.0	0.0	
Delaware										
Department of Defense, RDT&E	25,990.2	868.4	7,406.0	0.0	17,715.8	0.0	0.0	0.0	0.0	
Department of Defense, research	19,048.8	23.4	2,184.5	0.0	16,840.9	0.0	0.0	0.0	0.0	

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Department of Defense, total experimental development ^b	6,897.8	845.0	5,199.8	0.0	853.0	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	43.6	0.0	21.7	0.0	21.9	0.0	0.0	0.0	0.0
District of Columbia									
Department of Defense, RDT&E	4,510,478.5	3,729,194.3	579,814.2	0.0	33,043.3	0.0	165,938.5	2,482.9	5.2
Department of Defense, research	460,249.2	395,036.2	20,496.6	0.0	19,989.0	0.0	22,244.5	2,482.9	0.0
Department of Defense, total experimental development ^b	3,161,464.1	2,549,120.2	458,491.2	0.0	12,956.8	0.0	140,890.7	0.0	5.2
Department of Defense, operational systems development ^c	888,765.2	785,037.9	100,826.5	0.0	97.6	0.0	2,803.3	0.0	0.0
Florida									
Department of Defense, RDT&E	2,733,975.6	971,598.0	1,675,894.8	0.0	67,582.0	0.0	18,900.8	0.0	0.0
Department of Defense, research	236,892.1	95,812.2	69,774.9	0.0	61,338.9	0.0	9,966.1	0.0	0.0
Department of Defense, total experimental development ^b	2,138,937.7	796,427.0	1,329,846.7	0.0	6,114.4	0.0	6,549.6	0.0	0.0
Department of Defense, operational systems development ^c	358,145.7	79,358.8	276,273.3	0.0	128.6	0.0	2,385.0	0.0	0.0
Georgia									
Department of Defense, RDT&E	832,259.3	361,721.6	261,222.5	0.0	190,021.7	0.0	19,293.5	0.0	0.0
Department of Defense, research	105,211.0	3,376.2	18,236.3	0.0	80,948.4	0.0	2,650.1	0.0	0.0
Department of Defense, total experimental development ^b	399,508.4	161,864.2	126,223.0	0.0	98,844.8	0.0	12,576.4	0.0	0.0
Department of Defense, operational systems development ^c	327,539.9	196,481.2	116,763.1	0.0	10,228.6	0.0	4,067.0	0.0	0.0
Hawaii									
Department of Defense, RDT&E	256,595.1	150,058.2	84,111.1	0.0	14,224.5	0.0	8,193.4	0.0	7.9

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Department of Defense, research	53,638.7	3,423.8	31,024.2	0.0	11,224.6	0.0	7,961.3	0.0	4.8
Department of Defense, total experimental development ^b	199,793.2	146,387.9	51,881.9	0.0	1,288.0	0.0	232.1	0.0	3.2
Department of Defense, operational systems development ^c	3,163.3	246.4	1,205.0	0.0	1,711.9	0.0	0.0	0.0	0.0
Idaho									
Department of Defense, RDT&E	44,391.3	9,619.8	12,102.0	15,824.7	6,844.9	0.0	0.0	0.0	0.0
Department of Defense, research	11,922.5	328.0	2,623.0	2,712.6	6,259.0	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	28,893.0	9,231.8	8,770.0	10,314.1	577.1	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	3,575.8	60.0	709.0	2,798.0	8.8	0.0	0.0	0.0	0.0
Illinois									
Department of Defense, RDT&E	549,459.8	156,891.5	278,887.4	0.0	100,685.0	2,253.0	8,843.0	0.0	1,900.0
Department of Defense, research	131,903.8	14,614.1	19,151.9	0.0	93,736.8	2,253.0	248.0	0.0	1,900.0
Department of Defense, total experimental development ^b	328,490.8	92,472.4	220,932.8	0.0	6,723.7	0.0	8,362.0	0.0	0.0
Department of Defense, operational systems development ^c	89,065.2	49,805.0	38,802.7	0.0	224.5	0.0	233.0	0.0	0.0
Indiana									
Department of Defense, RDT&E	429,166.3	202,457.6	181,935.0	0.0	44,108.9	0.0	664.7	0.0	0.0
Department of Defense, research	61,660.2	9,519.9	10,262.3	0.0	41,387.4	0.0	490.6	0.0	0.0
Department of Defense, total experimental development ^b	265,368.5	131,392.7	131,147.3	0.0	2,654.4	0.0	174.1	0.0	0.0
Department of Defense, operational systems development ^c	102,137.5	61,545.0	40,525.4	0.0	67.1	0.0	0.0	0.0	0.0
lowa									

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Department of Defense, RDT&E	222,044.0	3,956.7	208,757.3	0.0	8,950.3	379.6	0.0	0.0	0.0
Department of Defense, research	24,822.8	2,771.0	13,978.1	0.0	7,694.1	379.6	0.0	0.0	0.0
Department of Defense, total experimental development ^b	109,071.6	1,185.7	106,645.4	0.0	1,240.5	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	88,149.6	0.1	88,133.8	0.0	15.7	0.0	0.0	0.0	0.0
Kansas									
Department of Defense, RDT&E	31,171.2	2,562.5	6,204.5	0.0	21,778.8	0.0	625.5	0.0	0.0
Department of Defense, research	22,919.1	1,096.3	498.1	0.0	20,701.8	0.0	622.9	0.0	0.0
Department of Defense, total experimental development ^b	7,950.2	1,355.5	5,622.4	0.0	969.6	0.0	2.6	0.0	0.0
Department of Defense, operational systems development ^c	302.0	110.7	84.0	0.0	107.3	0.0	0.0	0.0	0.0
Kentucky									
Department of Defense, RDT&E	34,362.3	1,380.2	29,865.3	0.0	3,116.8	0.0	0.0	0.0	0.0
Department of Defense, research	4,070.9	476.7	1,397.9	0.0	2,196.3	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	16,245.8	303.8	15,023.4	0.0	918.7	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	14,045.5	599.7	13,444.0	0.0	1.8	0.0	0.0	0.0	0.0
Louisiana									
Department of Defense, RDT&E	126,028.6	1,864.0	118,893.2	0.0	4,719.9	0.0	551.0	0.0	0.4
Department of Defense, research	7,189.4	0.0	2,440.2	0.0	4,337.8	0.0	411.4	0.0	0.0
Department of Defense, total experimental development ^b	116,985.8	1,864.0	114,605.9	0.0	375.8	0.0	139.6	0.0	0.4
Department of Defense, operational systems development ^c	1,853.5	0.0	1,847.1	0.0	6.3	0.0	0.0	0.0	0.0

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Maine									
Department of Defense, RDT&E	24,569.6	492.7	4,959.1	0.0	17,193.0	0.0	1,924.7	0.0	0.0
Department of Defense, research	11,702.0	0.0	428.4	0.0	10,461.8	0.0	811.7	0.0	0.0
Department of Defense, total experimental development ^b	12,800.4	487.3	4,472.8	0.0	6,727.4	0.0	1,113.0	0.0	0.0
Department of Defense, operational systems development ^c	67.2	5.5	57.9	0.0	3.8	0.0	0.0	0.0	0.0
Maryland									
Department of Defense, RDT&E	4,918,047.0	2,725,997.5	1,405,578.1	1,316.4	700,871.8	0.0	78,967.5	5,214.6	101.0
Department of Defense, research	530,443.9	244,547.1	134,569.6	957.5	108,094.1	0.0	41,993.9	200.0	81.8
Department of Defense, total experimental development ^b	3,608,597.6	1,943,679.9	1,117,799.0	359.0	523,030.4	0.0	23,514.1	196.0	19.2
Department of Defense, operational systems development ^c	779,005.5	537,770.4	153,209.6	0.0	69,747.4	0.0	13,459.5	4,818.6	0.0
Massachusetts									
Department of Defense, RDT&E	3,504,705.4	333,401.7	2,130,633.0	0.0	248,497.1	464,914.3	111,352.1	215,907.1	0.0
Department of Defense, research	554,591.9	24,576.1	231,337.6	0.0	198,299.0	61,800.4	35,869.8	2,709.1	0.0
Department of Defense, total experimental development ^b	2,307,703.6	150,723.1	1,602,064.0	0.0	44,904.4	334,039.5	62,524.5	113,448.2	0.0
Department of Defense, operational systems development ^c	642,409.9	158,102.5	297,231.4	0.0	5,293.7	69,074.4	12,957.9	99,749.9	0.0
Michigan									
Department of Defense, RDT&E	1,140,455.8	256,401.7	730,438.0	0.0	58,520.5	0.0	95,095.5	0.0	0.0
Department of Defense, research	120,203.1	9,921.2	14,452.2	0.0	52,397.1	0.0	43,432.5	0.0	0.0
Department of Defense, total experimental development ^b	744,242.0	181,578.9	530,222.3	0.0	5,394.1	0.0	27,046.8	0.0	0.0

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Department of Defense, operational systems development ^c	276,010.7	64,901.7	185,763.4	0.0	729.4	0.0	24,616.3	0.0	0.0
Minnesota									
Department of Defense, RDT&E	220,999.9	5,617.1	169,112.8	0.0	28,056.7	0.0	18,213.4	0.0	0.0
Department of Defense, research	75,401.3	888.0	56,102.1	0.0	18,197.8	0.0	213.4	0.0	0.0
Department of Defense, total experimental development ^b	142,270.5	4,719.3	109,725.8	0.0	9,825.4	0.0	18,000.0	0.0	0.0
Department of Defense, operational systems development ^c	3,328.1	9.7	3,284.9	0.0	33.5	0.0	0.0	0.0	0.0
Mississippi									
Department of Defense, RDT&E	186,414.0	97,308.8	52,840.2	0.0	36,258.2	0.0	6.7	0.0	0.0
Department of Defense, research	18,448.1	7,246.9	642.4	0.0	10,558.9	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	166,576.4	88,732.2	52,141.5	0.0	25,696.0	0.0	6.7	0.0	0.0
Department of Defense, operational systems development ^c	1,389.4	1,329.7	56.3	0.0	3.3	0.0	0.0	0.0	0.0
Missouri									
Department of Defense, RDT&E	1,303,142.9	70,965.7	1,211,105.6	0.0	19,004.9	0.0	2,066.7	0.0	0.0
Department of Defense, research	47,868.9	3,181.5	27,140.9	0.0	15,518.4	0.0	2,028.0	0.0	0.0
Department of Defense, total experimental development ^b	982,092.2	58,099.6	920,484.5	0.0	3,469.3	0.0	38.7	0.0	0.0
Department of Defense, operational systems development ^c	273,181.8	9,684.5	263,480.1	0.0	17.2	0.0	0.0	0.0	0.0
Montana									
Department of Defense, RDT&E	28,590.7	732.7	7,267.0	0.0	20,391.0	0.0	200.0	0.0	0.0
Department of Defense, research	15,617.1	0.0	2,884.6	0.0	12,532.4	0.0	200.0	0.0	0.0

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Department of Defense, total experimental development ^b	8,303.1	492.7	3,333.9	0.0	4,476.6	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	4,670.5	240.0	1,048.5	0.0	3,382.1	0.0	0.0	0.0	0.0
Nebraska									
Department of Defense, RDT&E	46,988.2	9,699.9	32,660.0	0.0	4,186.7	0.0	441.6	0.0	0.0
Department of Defense, research	6,173.1	919.1	1,414.0	0.0	3,398.4	0.0	441.6	0.0	0.0
Department of Defense, total experimental development ^b	8,980.4	1,583.3	6,609.7	0.0	787.5	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	31,834.6	7,197.5	24,636.4	0.0	0.8	0.0	0.0	0.0	0.0
Nevada									
Department of Defense, RDT&E	160,985.6	3,766.0	152,040.2	0.0	5,179.3	0.0	0.0	0.0	0.0
Department of Defense, research	8,223.7	981.3	3,122.7	0.0	4,119.6	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	141,202.5	2,768.3	137,376.8	0.0	1,057.3	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	11,559.4	16.4	11,540.6	0.0	2.4	0.0	0.0	0.0	0.0
New Hampshire									
Department of Defense, RDT&E	507,206.1	10,869.6	488,159.0	0.0	8,096.1	0.0	81.3	0.0	0.0
Department of Defense, research	19,317.9	389.7	11,326.5	0.0	7,601.8	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	428,844.5	8,469.7	419,812.0	0.0	481.4	0.0	81.3	0.0	0.0
Department of Defense, operational systems development ^c	59,043.8	2,010.3	57,020.5	0.0	13.0	0.0	0.0	0.0	0.0
New Jersey									
Department of Defense, RDT&E	2,475,300.5	1,766,014.4	651,687.2	0.0	53,622.6	2,206.1	1,269.2	0.0	500.9

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

			Extramural							
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments	
Department of Defense, research	233,291.0	96,941.6	96,497.6	0.0	38,836.5	0.0	514.3	0.0	500.9	
Department of Defense, total experimental development ^b	1,871,003.1	1,387,811.0	474,330.1	0.0	5,900.9	2,206.1	754.9	0.0	0.0	
Department of Defense, operational systems development ^c	371,006.3	281,261.7	80,859.5	0.0	8,885.2	0.0	0.0	0.0	0.0	
New Mexico										
Department of Defense, RDT&E	1,634,518.9	720,283.1	569,732.2	316,253.1	24,151.2	0.0	3,703.5	0.0	395.8	
Department of Defense, research	301,288.0	173,469.8	79,682.1	30,016.4	15,052.1	0.0	2,740.2	0.0	327.4	
Department of Defense, total experimental development ^b	1,203,929.0	517,738.5	437,003.5	239,148.8	9,006.4	0.0	963.3	0.0	68.4	
Department of Defense, operational systems development ^c	129,302.0	29,074.8	53,046.6	47,087.9	92.8	0.0	0.0	0.0	0.0	
New York										
Department of Defense, RDT&E	1,137,541.9	112,761.1	879,792.4	0.0	114,110.8	0.0	29,838.7	389.0	650.0	
Department of Defense, research	296,818.0	42,535.0	130,011.6	0.0	107,947.2	0.0	15,285.2	389.0	650.0	
Department of Defense, total experimental development ^b	738,409.9	39,848.1	678,108.7	0.0	5,899.7	0.0	14,553.5	0.0	0.0	
Department of Defense, operational systems development ^c	102,314.1	30,378.0	71,672.1	0.0	263.9	0.0	0.0	0.0	0.0	
North Carolina										
Department of Defense, RDT&E	260,431.3	23,094.0	156,128.2	0.0	60,263.1	0.0	20,506.1	0.0	439.7	
Department of Defense, research	96,660.5	3,817.5	17,869.2	0.0	54,567.6	0.0	20,406.1	0.0	0.0	
Department of Defense, total experimental development ^b	151,574.6	13,978.6	131,439.9	0.0	5,616.4	0.0	100.0	0.0	439.7	
Department of Defense, operational systems development ^c	12,196.2	5,297.9	6,819.1	0.0	79.1	0.0	0.0	0.0	0.0	
North Dakota										

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

						Extramural			
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments
Department of Defense, RDT&E	3,379.9	1,095.9	594.4	0.0	1,689.6	0.0	0.0	0.0	0.0
Department of Defense, research	1,484.2	12.3	12.7	0.0	1,459.2	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	1,720.4	1,083.7	406.4	0.0	230.4	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	175.3	0.0	175.3	0.0	0.0	0.0	0.0	0.0	0.0
Ohio									
Department of Defense, RDT&E	4,336,531.7	2,347,271.4	1,844,769.0	0.0	107,352.3	0.0	37,139.0	0.0	0.0
Department of Defense, research	754,338.9	421,697.5	211,699.7	0.0	96,381.4	0.0	24,560.3	0.0	0.0
Department of Defense, total experimental development ^b	3,032,802.9	1,645,365.0	1,364,950.7	0.0	10,331.6	0.0	12,155.6	0.0	0.0
Department of Defense, operational systems development ^c	549,390.0	280,208.9	268,118.7	0.0	639.3	0.0	423.0	0.0	0.0
Oklahoma									
Department of Defense, RDT&E	265,190.2	96,980.6	154,970.1	0.0	13,239.5	0.0	0.0	0.0	0.0
Department of Defense, research	19,967.8	894.4	6,673.4	0.0	12,399.9	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	134,678.9	93,332.8	40,524.3	0.0	821.8	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	110,543.6	2,753.4	107,772.4	0.0	17.7	0.0	0.0	0.0	0.0
Oregon									
Department of Defense, RDT&E	104,175.6	1,455.6	90,127.4	0.0	12,592.6	0.0	0.0	0.0	0.0
Department of Defense, research	47,620.4	400.1	37,761.5	0.0	9,458.8	0.0	0.0	0.0	0.0
Department of Defense, total experimental development ^b	51,061.1	1,051.3	46,878.6	0.0	3,131.2	0.0	0.0	0.0	0.0
Department of Defense, operational systems development ^c	5,494.1	4.1	5,487.4	0.0	2.6	0.0	0.0	0.0	0.0

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

				Extramural							
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments		
Pennsylvania											
Department of Defense, RDT&E	1,760,268.7	369,743.3	1,031,784.4	0.0	302,259.6	46,457.7	10,023.7	0.0	0.0		
Department of Defense, research	213,346.9	11,531.7	29,679.5	0.0	159,288.3	10,890.0	1,957.4	0.0	0.0		
Department of Defense, total experimental development ^b	943,783.1	286,497.7	496,560.4	0.0	134,588.5	24,038.0	2,098.5	0.0	0.0		
Department of Defense, operational systems development ^c	603,138.7	71,713.8	505,544.6	0.0	8,382.7	11,529.7	5,967.8	0.0	0.0		
Rhode Island											
Department of Defense, RDT&E	471,369.0	308,917.5	134,763.9	0.0	26,949.8	0.0	737.7	0.0	0.0		
Department of Defense, research	46,711.1	21,609.1	2,492.5	0.0	21,871.8	0.0	737.7	0.0	0.0		
Department of Defense, total experimental development ^b	368,791.6	237,929.4	125,801.3	0.0	5,060.8	0.0	0.0	0.0	0.0		
Department of Defense, operational systems development ^c	55,866.4	49,379.0	6,470.1	0.0	17.3	0.0	0.0	0.0	0.0		
South Carolina											
Department of Defense, RDT&E	531,962.7	126,389.6	327,343.3	6,383.4	8,513.9	0.0	63,332.4	0.0	0.0		
Department of Defense, research	29,238.2	10,342.4	3,486.1	729.0	7,934.0	0.0	6,746.7	0.0	0.0		
Department of Defense, total experimental development ^b	268,589.6	54,136.0	151,687.7	5,625.4	554.7	0.0	56,585.7	0.0	0.0		
Department of Defense, operational systems development ^c	234,134.8	61,911.2	172,169.5	29.0	25.2	0.0	0.0	0.0	0.0		
South Dakota											
Department of Defense, RDT&E	12,967.1	39.4	12,566.2	0.0	361.5	0.0	0.0	0.0	0.0		
Department of Defense, research	5,595.2	9.2	5,233.5	0.0	352.5	0.0	0.0	0.0	0.0		
Department of Defense, total experimental development ^b	7,263.9	30.2	7,225.8	0.0	7.9	0.0	0.0	0.0	0.0		

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

			Extramural								
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments		
Department of Defense, operational systems development ^c	107.9	0.0	106.8	0.0	1.1	0.0	0.0	0.0	0.0		
Tennessee											
Department of Defense, RDT&E	743,468.2	249,679.2	445,923.2	0.0	25,758.3	0.0	11,671.9	10,435.6	0.0		
Department of Defense, research	67,025.6	22,974.5	2,997.4	0.0	23,386.2	0.0	11,196.6	6,470.9	0.0		
Department of Defense, total experimental development ^b	550,727.9	204,936.7	339,491.9	0.0	2,346.2	0.0	475.3	3,477.8	0.0		
Department of Defense, operational systems development ^c	125,714.8	21,768.0	103,433.9	0.0	25.9	0.0	0.0	487.0	0.0		
Texas											
Department of Defense, RDT&E	2,991,700.8	161,116.4	2,642,014.1	0.0	165,839.1	0.0	18,706.5	4,024.6	0.1		
Department of Defense, research	183,625.4	13,446.2	52,944.4	0.0	108,139.0	0.0	9,085.3	10.6	0.0		
Department of Defense, total experimental development ^b	1,679,548.5	68,644.0	1,548,753.8	0.0	48,561.3	0.0	9,575.2	4,014.1	0.1		
Department of Defense, operational systems development ^c	1,128,526.8	79,026.2	1,040,315.9	0.0	9,138.7	0.0	46.0	0.0	0.0		
Utah											
Department of Defense, RDT&E	796,663.4	251,218.6	495,840.6	0.0	48,575.5	0.0	1,028.7	0.0	0.0		
Department of Defense, research	25,629.2	1,699.5	2,418.8	0.0	21,081.0	0.0	429.9	0.0	0.0		
Department of Defense, total experimental development ^b	453,009.1	143,863.3	284,310.8	0.0	24,236.2	0.0	598.8	0.0	0.0		
Department of Defense, operational systems development ^c	318,025.1	105,655.9	209,110.9	0.0	3,258.3	0.0	0.0	0.0	0.0		
Vermont											
Department of Defense, RDT&E	26,910.6	819.3	25,614.5	0.0	476.8	0.0	0.0	0.0	0.0		
Department of Defense, research	1,134.8	0.0	672.9	0.0	461.8	0.0	0.0	0.0	0.0		

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

			Extramural							
State or location and agency	Total	Intramural ^a	Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments	
Department of Defense, total experimental development ^b	25,520.3	819.3	24,687.8	0.0	13.1	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	255.6	0.0	253.7	0.0	1.8	0.0	0.0	0.0	0.0	
Virginia										
Department of Defense, RDT&E	6,944,837.0	2,143,209.2	4,297,551.2	0.0	109,432.5	0.0	48,850.9	345,767.7	25.6	
Department of Defense, research	926,078.8	213,881.4	584,531.7	0.0	84,535.2	0.0	11,821.4	31,309.2	0.0	
Department of Defense, total experimental development ^b	5,116,616.0	1,698,128.1	3,106,123.7	0.0	24,536.6	0.0	30,795.0	257,007.0	25.6	
Department of Defense, operational systems development ^c	902,142.2	231,199.7	606,895.8	0.0	360.7	0.0	6,234.5	57,451.5	0.0	
Washington										
Department of Defense, RDT&E	1,282,852.2	255,345.1	932,030.5	0.0	61,531.5	0.0	5,834.0	28,111.0	0.0	
Department of Defense, research	101,763.3	4,986.2	14,549.8	0.0	54,104.4	0.0	5,541.9	22,580.9	0.0	
Department of Defense, total experimental development ^b	1,116,842.0	231,040.9	873,101.8	0.0	7,107.5	0.0	292.1	5,299.7	0.0	
Department of Defense, operational systems development ^c	64,246.8	19,317.9	44,378.9	0.0	319.6	0.0	0.0	230.5	0.0	
West Virginia										
Department of Defense, RDT&E	5,922.6	128.1	2,149.2	0.0	3,192.6	0.0	452.7	0.0	0.0	
Department of Defense, research	2,884.8	52.2	97.3	0.0	2,532.6	0.0	202.7	0.0	0.0	
Department of Defense, total experimental development ^b	2,984.4	75.9	2,017.0	0.0	641.5	0.0	250.0	0.0	0.0	
Department of Defense, operational systems development ^c	53.4	*	34.9	0.0	18.5	0.0	0.0	0.0	0.0	
Wisconsin										
Department of Defense, RDT&E	87,555.6	509.3	66,656.4	0.0	20,379.7	0.0	10.2	0.0	0.0	

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

State or location and agency	Total	Intramural ^a	Extramural							
			Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments	
Department of Defense, research	31,006.7	250.0	10,909.6	0.0	19,838.6	0.0	8.5	0.0	0.0	
Department of Defense, total experimental development ^b	55,779.4	2.1	55,259.6	0.0	516.0	0.0	1.7	0.0	0.0	
Department of Defense, operational systems development ^c	769.5	257.3	487.2	0.0	25.0	0.0	0.0	0.0	0.0	
Wyoming										
Department of Defense, RDT&E	3,304.8	11.7	2,351.8	0.0	941.3	0.0	0.0	0.0	0.0	
Department of Defense, research	893.5	0.0	1.1	0.0	892.5	0.0	0.0	0.0	0.0	
Department of Defense, total experimental development ^b	2,173.3	11.7	2,112.7	0.0	48.8	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	238.0	0.0	238.0	0.0	0.0	0.0	0.0	0.0	0.0	
Outlying areas										
Department of Defense, RDT&E	4,459,612.4	4,444,007.8	14,129.7	0.0	1,475.0	0.0	0.0	0.0	0.0	
Department of Defense, research	1,657.8	204.0	5.0	0.0	1,448.8	0.0	0.0	0.0	0.0	
Department of Defense, total experimental development ^b	368,819.9	368,723.8	73.2	0.0	22.9	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	4,089,134.7	4,075,080.0	14,051.5	0.0	3.2	0.0	0.0	0.0	0.0	
Puerto Rico										
Department of Defense, RDT&E	1,766.1	218.9	72.2	0.0	1,475.0	0.0	0.0	0.0	0.0	
Department of Defense, research	1,657.8	204.0	5.0	0.0	1,448.8	0.0	0.0	0.0	0.0	
Department of Defense, total experimental development ^b	105.1	14.9	67.2	0.0	22.9	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	3.2	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	

TABLE 94

Department of Defense obligations for research, development, test, and evaluation, by state or location and performer: FY 2019
(Dollars in thousands)

	Total	Intramural ^a	Extramural							
State or location and agency			Industry	Industry- administered FFRDCs	Universities and colleges	University- administered FFRDCs	Other nonprofits	Nonprofit- administered FFRDCs	State, local governments	
Other areas ^d										
Department of Defense, RDT&E	4,457,846.3	4,443,788.9	14,057.4	0.0	0.0	0.0	0.0	0.0	0.0	
Department of Defense, research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Department of Defense, total experimental development ^b	368,714.9	368,708.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	4,089,131.5	4,075,080.0	14,051.5	0.0	0.0	0.0	0.0	0.0	0.0	
Offices abroad ^e										
Department of Defense, RDT&E	3,806.5	141.4	3,321.3	0.0	343.9	0.0	0.0	0.0	0.0	
Department of Defense, research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Department of Defense, total experimental development ^b	3,736.3	141.1	3,251.3	0.0	343.9	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	70.2	0.2	70.0	0.0	0.0	0.0	0.0	0.0	0.0	
Undistributed ^f										
Department of Defense, RDT&E	21,644,568.1	1,527,495.3	20,114,774.1	0.0	2,298.7	0.0	0.0	0.0	0.0	
Department of Defense, research	881,859.1	549,761.6	331,274.2	0.0	823.3	0.0	0.0	0.0	0.0	
Department of Defense, total experimental development ^b	1,455,073.2	776,190.5	677,407.3	0.0	1,475.4	0.0	0.0	0.0	0.0	
Department of Defense, operational systems development ^c	19,307,635.8	201,543.2	19,106,092.6	0.0	0.0	0.0	0.0	0.0	0.0	

^{* =} amount greater than \$0 but less than \$50.

FFRDC = federally funded research and development center; RDT&E = research, development, test, and evaluation.

Note(s):

Because of rounding, detail may not add to total. Geographic distribution of DOD development funding to industry reflects location of prime contractors and not the numerous subcontractors who perform much of the R&D. See technical table A-2 for additional notes associated with the agencies listed in this table.

Source(s)

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2019-20.

a Intramural activities cover costs associated with the administration of intramural R&D programs and extramural R&D procurements by federal personnel as well as actual intramural performance.

b Department of Defense (DOD) development obligations have been reported in two categories, advanced technology and major systems, since volume 44 (FYs 1994–96). As of volume 66 (FYs 2016–17), the definition of major systems development was changed to represent DOD Budget Activities 4 through 6 instead of Budget Activities 4 through 7.

^c Funding for DOD's operational systems development (Budget Activity 7) was first reported as a separate category for volume 66.

d Includes American Samoa, Baker Island, Guam, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Northern Mariana Islands, Palmyra Atoll, U.S. Virgin Islands, and Wake Island.

^e Includes both R&D and RDT&E performed or administered in foreign countries by the U.S. government.

^f Undistributed totals include DOD obligations for which the location of performance is not reported.